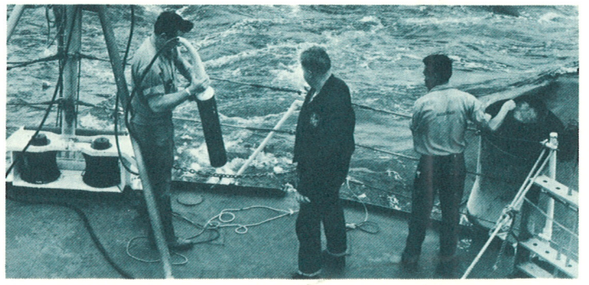
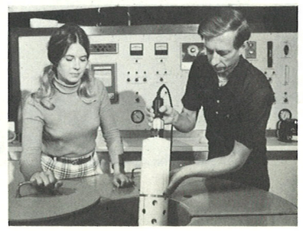
NOAA CAREERS & CHALLENGES

U.S. DEPARTMENT OF COMMERCE • National Oceanic and Atmospheric Administration





NOAA

CAREER OPPORTUNIT

NOAA, created within the Department of Commerce in October 1970, was formed to improve people's understanding and use of their physical environment and oceanic resources in order to preserve and improve the quality of their life. Through its Major Line Components—Fisheries, Coastal Zone Management, Research and Development, and Oceanic and Atmospheric Services—NOAA carries out broad programs of research and service in all of the environmental sciences.

NOAA is a multi-faceted agency comprised of the following Major Program Elements:
Office of Sea Grant
Office of Ocean Engineering
Environmental Research Laboratories
Environmental Data Information Service
National Environmental Satellite Service
National Ocean Survey
National Weather Service
National Marine Fisheries Service

All of these program elements have headquarters in Metropolitan Washington, DC with one exception. Boulder, Colorado is headquarters for the Environmental Research Laboratories.

Field forces—personnel assigned to fisheries laboratories, communication centers, research facilities, ship bases, mobile survey teams, and research and photograhic air missions—constitute the largest part of NOAA's staff and are distributed throughout the United States and in selected foreign areas.

Meteorologists at NOAA analyze weather data gathered by satellites, radiosondes, and extensive networks of instrumented stations to prepare a variety of weather forecasts for the general public and for specialized groups such as aviators, mariners, and farmers. Research meteorologists are engaged in atmospheric physics research, investigating relationships between various meteorological events at all scales, extending and refining existing theory, and improving the precision of mathematical models of atmospheric processes. They are also studying severe storms mechanics, and the feasibility of weather modification. They participate in studies which seek to use new observational, computational, and analytical technology in weather prediction, and contribute to development of new meteorological instruments—such as the NOAA satellite system. Where they are concerned with weather in a historical sense, meteorologists work as climatologists, collecting, analyzing, interpreting, and summarizing past weather information for locations all over the world.

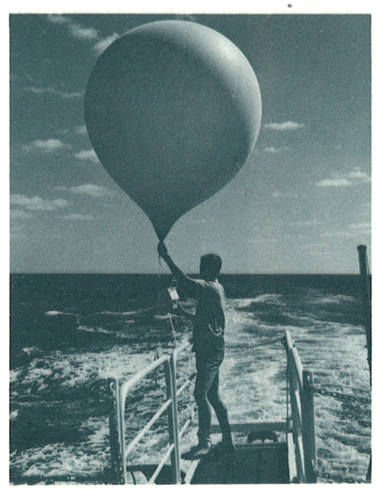
Meteorologists are assigned in the National Weather Service, Environmental Research Laboratories, National Environmental Satellite Service and Environmental Data Information Service. They serve in some 300 Weather Service Offices in cities across the land, at airport weather stations, in state climatological offices, or in one of NOAA's research laboratories. They also serve aboard ships, participating with NOAA's oceanographers and geophysicists in ocean-environment research.

Hydrologists at NOAA are concerned with floods and flood forecasting, river flow analysis, and supporting research in related areas. River forecast stations are located in the major river basins, and issue flood forecasts and warnings as required. On the research side, NOAA hydrologists seek to improve their comprehension of the hydrologic cycle—the movement of water between the earth, oceans, and atmosphere—and to develop new computer applications for hydrologic projects. Jobs are primarily with the National Weather Service.

Fishery Biologists study the problems of growth and reproduction of fish and shellfish, attack the problems of disease, and identify and study subdivisions of oceanic stock. To carry out this research, NOAA's fishery biologists study the life history, habits, classification, and economic relations of aquatic organisms to ensure an adequate and dependable supply of fish and shellfish, and the conservation and growth of the fishing industry. They study the effects of environmental and man-made changes on fish, determine rearing and planting for maximum success in hatchery operations, and devise ways to regulate fishing to ensure a continuing maximum yield. Specialization is often possible in such fields as embryology, histology, physiology, serology, and virology. NOAA's fishery biologists work primarily in the National Marine Fisheries Service.

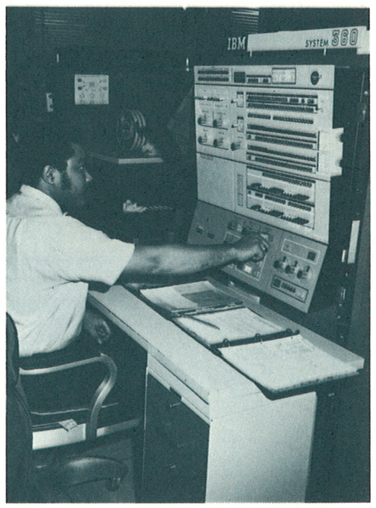
Physicists at NOAA participate in basic and applied research over the entire range of environmental science. Their work may be basic research in rock fracture mechanics, or they may work in a more general area, for example, large-scale atmospheric circulations. They may be involved in theoretical studies or they may work on the practical side, relating theoretical studies to a particular industry, user group, or agency investigation. They may also contribute to essentially developmental projects, as in the case of new environmental sensors and other necessary instruments. They forecast solar phenomena or the state of the upper atmosphere. They also study the physical characteristics of the earth, the oceans, or the ocean floor. Jobs are primarily with the Environmental Research Laboratories.

Geodesists are concerned with determining the precise size and shape of the earth and the location of points on its surface. Part of this work involves development and maintenance of the precise geodetic network which spans the continent; this is accomplished by survey teams in the field, and by office geodesists and mathematicians at NOAA headquarters. Gravity surveys and theoretical studies are also part of a geodesist's work with NOAA's National Ocean Survey and Environmental Research Laboratories.



Engineers at NOAA find challenging assignments across the full range of environmental science and service activities. General, electrical, electronic, and mechanical engineers develop instrumentation and equipment used in NOAA's investigation of the physical environment. Engineers develop advanced equipment for underwater measurements, such as the stable underwater platform for marine magnetic measurements, and also formulate requirements for new mechanical and instrument systems. NOAA engineers develop new environmental satellite sensors, shipboard data and navigational equipment, geodetic distance-measuring devices, meteorological instruments, infrared applications, and telemetry devices. Civil engineers with field teams conduct precise geodetic surveys, astronomic observations, photogrammetric control, and related operations throughout NOAA.

Mathematicians use their training in virtually every phase of NOAA activities, an indication of the trend toward automation—and away from drudgery—in environmental sciences. NOAA mathematicians work as computer programmers, develop computer applications to weather and sea state forecasting, perform geodetic computations, process geophysical, meteorological, and oceanographic data, and participate in mathematics research throughout NOAA.



TIES

Cartographers construct the aeronautical and nautical charts of NOAA's National Ocean Survey, to the Survey's high standards of accuracy. They also develop maps of earthquake areas, bathymetric charts, and other cartographic products, working in fixed locations and with mobile teams or ships in the field. NOAA cartographers also perform professional work in photo-interpretation, analytic photogrammetry, and aerotriangulation.

Chemists work primarily in NOAA's National Marine Fisheries Service and carry out research to develop new and better fish products for food and industrial uses. NOAA's chemists also investigate methods to improve the handling, processing, preserving and distribution of fish, fish products, and shellfish. They may also develop information on sanitation measures and requirements for standards to be set by the Federal Government for fishery products. Jobs are with the National Marine Fisheries Service.

Oceanographers are scientists whose interests are primarily with the global ocean—its physical properties and dynamics (the circulation of currents of the waters), its interaction with the air and land; its chemical composition; the contours, structure or composition of the ocean floor; and the habits and interrelationships of the plants and animals that inhabit the levels of the sea. The work of NOAA's oceanographers covers an exciting variety of scientific activities, including the study of tsunamis (sea waves), the development of new underwater sensors, and the establishment of data systems that will achieve maximum use of their output, the study of tidal and current variations, the compilation of special bathymetric charts as part of the Nation's ocean survey (SEAMAP) program, the study of the marine environment and its effect on the distribution and abundance of commercially valuable fish, and the development of oceanographic models that help to monitor changes in the marine environment, the development and production of computer displays of oceanographic variables, and participation in national and international exploratory programs.

NOAA's oceanographers are located in the National Ocean Survey, the Environmental Research Laboratories, the National Marine Fisheries Service, and the Environmental Data Information Service.

Computer Scientists are involved in all facets of NOAA's scientific mission, working in close interrelationship with every scientific discipline to provide the most coherent view possible of the physical world by organizing, statistically analyzing, archiving, and disseminating day-to-day, month-to-month, and year-to-year environmental data gathered from ships, land stations, aircraft, buoys, and satellites. The largest computers in the world are used for modeling weather and oceanic phenomena throughout NOAA.

Enforcement Agents (Fishery) work in the National Marine Fisheries Service and are charged with enforcing domestic fisheries regulations under the international fisheries agreements to which the United States is a party. This involves monitoring compliance by foreign fishing vessels in the contiguous fishing zone and territorial waters—enforcing the 200 mile limit and U.S. statutes prohibiting possession or importation of illegally taken fish and wildlife—and the surveillance of foreign fishing operations to ensure compliance with the provisions of various treaties and agreements to which the United States is a party. These agents utilize a combination of Biology and Law Enforcement backgrounds.

NOAA Corps, a vital part of NOAA's scientific team, is one of the Nation's seven uniformed services. It provides a select number of engineering and science graduates the opportunity to combine a career in the environmental sciences with service to their country as commissioned officers. Grade structure is identical to the Navy and Coast Guard: NOAA officers follow a similar career pattern combining sea duty with mobile and fixed shore duty at NOAA installations.

General questions on the NOAA Corps should be directed to the appropriate NOAA office listed below:

NOAA Corps Recruiting Officer
NOAA Officer Training Center
Furuseth Hall N-120
U.S. Merchant Marine Academy
Kings Point, NY 11024
(516) 482-8200 Ext. 360

NOAA Corps Recruiting Officer
Pacific Marine Center
National Ocean Survey, NOAA
1801 Fairview Avenue, East
Seattle, WA 98102
(206) 442-7656

NOAA Corps Recruiting Officer
Environmental Research Laboratories
(R58)
Boulder, CO 80302
(303) 449-6546

Recruiting Officer
Commissioned Personnel Division
NOAA (NC1)
Rockville, MD 20852
(301) 443-8616

Graduate Scientist is a one year full-time university study program for graduates with a Bachelors or Masters degree in a *scientific discipline* who lack scientific training in a specific NOAA discipline (e.g., a physics major who lacks hours in meteorology in order to qualify as a meteorologist or a biology major who needs training in a fishery specialty to qualify as a Fishery Biologist). Selectees will enter this program in grades 4 through 7 and undergo intensive training to qualify for and be assigned into the appropriate scientific discipline.
Information concerning this program may be obtained from the Upward Mobility Branch, Rockville, MD 20852.

Cooperative Education is a program in NOAA whereby students alternate periods of planned full-time work experience with periods of full-time academic study to prepare for a permanent career in NOAA. The program is designed for two-year, four-year and graduate students. Students should apply through their school co-op offices.

In addition to careers in science and engineering, limited administrative careers exist in NOAA for graduates in Business Administration in accounting, finance, personnel management, and other administrative areas. Opportunities for advancement exist in NOAA for those employees who exhibit initiative, ability, and willingness to take on additional responsibility.

NOAA does have other scientific training programs available which are designed to develop applicants for positions as technicians and professionals in science and technology. Information concerning these programs may be obtained from the Office of Personnel, Special Personnel Programs Division, Rockville, MD 20852.

As we cross the threshold of a new exploratory age, as our grasp moves toward other planets and the stars, our great preoccupation turns increasingly homeward, to "Spaceship Earth", the garden of life in what may turn out to be a barren solar system. To those whose talents and imaginations are engaged by large unknowns, this planet presents an infinity of processes and interactions linking life and the physical world, and human generated depredations with planetary survival.

NOAA, the National Oceanic and Atmospheric Administration, is a leader in the national effort to comprehend these relationships and to improve our uses of the physical environment and oceanic life.

The NOAA family measures processes within the global ocean, study interactions among sea and land and sea and atmosphere, and map the geophysical structure and resources of the ocean floor. We describe and conserve the living resources of the sea, seek to develop new ones, and link the responses of marine life to environmental changes. We survey the varied faces of the continents and the effects of solar radiation on the earth and near-earth environment. We monitor and predict conditions in the atmosphere and ocean, and issue timely warnings against such destructive natural events as hurricanes, tornadoes, winter storms, tsunamis, and floods, and the potentially disruptive environmental changes which occur over decades, generations, and centuries. We are learning how to modify the environment, constructively and destructively, deliberately and inadvertently, and we are applying this knowledge to the benefit of the Nation and humankind.

It is work on a global scale, over a broad range of earth-looking disciplines, using as tools a mix of artificial satellites, instrumented aircraft, research ships, automated sensor stations, laboratories, and giant computers. For those who qualify, it is a singular opportunity to excel.

EMPLOYMENT INFORMATION

If you wish to apply for a position with NOAA, or you wish additional information about specific career areas, you may contact the appropriate Personnel Office. If you already have eligibility from the Office of Personnel Management for Federal employment, you may submit a Personal Qualifications Statement (SF-171). A list of NOAA Personnel Offices is provided in this brochure.

If you *do not* have Civil Service eligibility for Federal employment, you should contact the Area Office of the Office of Personnel Management nearest you regarding announcements in line with your education and employment interest, and proper filing procedures.

The majority of applicants for Federal employment must be rated by the Office of Personnel Management. The Office of Personnel Management administers written examinations and/or experience and education evaluations, and issues a written verification that the applicant has met the requirements for a particular position category. When you have received eligibility, the Office of Personnel Management will retain your application, which is filed in a competitive inventory, for referral to NOAA and other Federal agencies seeking the best qualified candidates to fill existing vacancies.

Personnel Offices

Chief, Personnel Division
632 6th Avenue
Anchorage, AK 99501
FTS 8-399-0150
(206) 442-0150 (Seattle Operator)
give operator 265-4724

Chief, Personnel Branch
NOAA—Atlantic Marine Center
439 W. York Street
Norfolk, VA 23510
FTS 8-827-6231
(804) 441-6231

Chief, Personnel Services
NOAA-ERL, 3001 Marine
Boulder, CO 80302
FTS 8-323-6305
(303) 499-1000 (operator) ext. 6305

Chief, Personnel Division
NWS—Western Region
125 South State Street
Federal Building
Salt Lake City, UT 84111
FTS 8-588-5128 (4010)
(801) 524-5128

Chief, Personnel Section
NWS—Southern Region
Room 10E09, 819 Taylor Street
Fort Worth, TX 76102
FTS 8-334-2663
(817) 334-2663

Chief, Personnel Section
National Climatic Center—EDIS
Federal Building
Asheville, NC 28801
FTS 8-672-0267
(704) 258-2850 ext. 267

Director, Office of Personnel
NOAA—Headquarters Personnel
5640 Nicholson Lane, Room 319
Rockville, Maryland 20852
(301) 443-8425

Chief, Personnel Branch
NWS—Pacific Region
Prince Jonah Kuhio Kalaniahaole
Federal Bldg., 300 Ala Moana, Rm. 4110
Honolulu, HI 96850
FTS 8-556-0220
(415) 556-0220 (San Fran operator)
ask for Honolulu (808) 546-5679

Chief, Personnel Division
NMFS—Southeast Region
9450 Koger Boulevard, Duval Building
St. Petersburg, FL 33702
FTS 8-826-3157
(813) 893-3157

Chief, Personnel Section
NWS—Eastern Region
585 Stewart Avenue
Garden City, NY 11530
FTS 8-665-8670
(212) 995-8670

Chief, Personnel Division
NASO
1700 Westlake Avenue, North
Seattle, WA 98109
FTS 8-399-5790
(206) 442-5790

Chief, Personnel Division
NMFS—Northeast Region
Federal Building
14 Elm Street
Gloucester, MA 01930
FTS 8-837-9240
(617) 281-3600

Chief, Personnel Division
NWS—Central Region
Room 1836, 601 E 12th Street
Kansas City, MO 64106
FTS 8-758-3196
(816) 374-3196

Chief, Personnel Branch
NOS—Personnel
6001 Executive Boulevard
Rockville, Maryland 20852
(301) 443-8186

Chief, Personnel Branch
NWS/NESS—Personnel
8060 13th Street, Room 1221
Silver Spring, MD 20910
(301) 427-7924

Chief, Personnel Branch
NMFS/EDIS—Personnel
2100 Wisconsin Avenue, NW
Page Bldg. 2, Room 299
Washington, D.C. 20235
(202) 634-7357

BENEFITS

Vacations:
Each year, depending upon their length of service, employees earn from 13 to 26 days of annual leave for vacation. Active military service in most cases counts as civilian service.

Holidays:
Employees are given nine national holidays each year: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, and Christmas Day.

Other Leave:
Sick Leave: Each year employees earn 13 days sick leave to be used for illness or medical, dental, or optical appointments. Unused sick leave accumulates without limit, and provides employees with excellent financial protection for periods of prolonged illness or injury.

Military Leave: Members of the National Guard or of the Armed Forces Reserves are entitled to military leave for training or other active duty. A maximum of 15 calendar days is allowed each year with full pay and without charge against other types of leave.

Education and Training
NOAA employees are encouraged to further their education and training. They may be assigned at full pay to a university for full-time graduate work or other advanced study related to their duties. Fees and travel expenses are also provided for approved attendance at professional conferences, conventions, and seminars. NOAA also pays tuition for all part-time college courses approved for employees.

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Life Insurance:
Group Life Insurance is available at a cost of only 25½¢ each two weeks for every $1,000 of insurance. The amount of regular insurance depends on the employee's basic annual pay. If an employee has the regular insurance, the employee may also elect optional insurance in the amount of $10,000. The cost depends on the employee's age.

Health Insurance:
Several Group Health Insurance plans are available to full-time employees that include Hospital, Surgical, and other related benefits. The cost of insurance and other benefits depends on the type of plan selected and the coverage desired. The Federal Government will pay up to 60 percent of the cost of health insurance.

Medical Compensation Benefits:
Any employee receiving an on-the-job injury or service-connected illness is entitled to medical attention, hospitalization and compensation free of charge. Compensation payments are at least two-thirds of an employee's salary.

Retirement System:
One of the outstanding advantages of NOAA employment is the model Federal Civil Service Retirement System. It provides for liberal annuities based on a combination of average salary and length of service.

Travel and Moving Expense:
NOAA pays travel and moving expenses to the first duty station for most scientific positions. These expenses are paid for all employees when they are required to change duty station.

NOAA follows a policy of equal opportunity in recruitment, training, promotion, and all other aspects of employment for all employees, regardless of race, color, religion, sex, age, national origin, or handicap. The Office of Civil Rights enforces these provisions. *If you feel there has been any discrimination shown in your interview or any aspect of your application procedure, contact, Director, Office of Civil Rights, 6001 Executive Blvd., Rockville, MD 20852, (301) 443-8247.*